

INTISARI

Gamavuton-0 dan mono-gamavuton-0 sudah terbukti memiliki efek analgetik. Kaliummonogamavuton merupakan garam kalium dari mono-gamavuton-0 (KMGVT-0). Namun senyawa ini belum pernah diteliti efek farmakologinya sebagai analgetik. Penelitian ini bertujuan untuk menguji efek analgetik pada mencit jantan galur BALB/C dengan metode geliat (*Writhing Test*) serta membandingkan parameter dengan potensi nilai ED₅₀ senyawa KMGVT-0 dengan parasetamol.

Sebanyak 70 mencit jantan galur BALB/C, dibagi dalam 10 kelompok. 5 kelompok diberi sediaan uji KMGVT-0 dosis 10, 20, 40, 80, dan 160 mg/kgBB per oral, 4 kelompok diberi parasetamol sebagai control positif dengan dosis 25, 50, 100 dan 200 mg/kgBB per oral, dan 1 kelompok diberi CMC Na 0,5% sebagai kontrol negatif dengan dosis 100 mg/kg BB, kemudian mencit diinduksi asam asetat 0,4% b/v dosis 100 mg/kgBB secara intraperitoneal. Pengamatan geliat setiap 5 menit selama 60 menit.

Hasil penelitian menunjukkan bahwa daya analgetik pada KMGVT-0 lebih poten dibandingkan parasetamol di mana ED₅₀ KMGVT-0 yaitu 36,50 mg/kg BB lebih kecil dibanding parasetamol yaitu 70,46 mg/kg BB.

Kata kunci : kurkumin, kaliummonogamavuton, analgetik, *Writhing Test*

ABSTRACT

Gamavuton-0 dan mono-gamavuton-0 has been proved to have analgesic effect. Kaliummonogamavuton is salt form of potassium from mono-gamavuton-0 (KMGVT-0). However, its analgesic effect has not been studied. The aim of this research is to test the analgesic effect of KMGVT-0 in male mice BALB / C strain using stretching method (writhing test) and to compare its analgesic potency with analgesic potency of paracetamol using ED₅₀ as parameter.

Total of 70 male mice BALB/C strain were divided into 10 groups, 5 groups were treated with KMGVT-0 orally (dose 10, 20, 40, 80, and 160 mg/kg BW), 4 groups were treated orally with paracetamol as positive control (dose 25, 50, 100 and 200 mg/kg BW), and 1 group for negative control treated with vehicle (0,5% Sodium CMC). Pain in mice was induced by i.p. injection of 0.4% acetic acid (dose 100 mg/kg BW). The writhing reflect was observed every 5 minutes for 60 minutes.

The result of this research indicate that the analgesic potency of KMGVT-0 is more potent than paracetamol which is ED₅₀ of KMGVT-0 is 36.50 mg/kg BW less than paracetamol 70.46 mg/kg BW.

Keywords: curcumin, potassium mono-gamavuton-0, analgesics, writhing Test